6th GRADE
MAIN RANGEFINDER
1

It is important that you show or explain how you solved the problems on this assessment. If you use a calculator, show how you set up the math.

1. You are going to make a green salad to take to a dinner party. The prices of the ingredients are below.

Lettuce	**2 bunches cost**	**$1.00**
Radishes	**3 bunches cost**	**$0.92**
Cucumbers	**each**	**$0.58**

a. How much will it cost to make a salad with 4 bunches of lettuce, 3 bunches of radishes, and 2 cucumbers? *Show or explain how you found your answer.*

$2.00
.92
+ .58
.58
$9.08

Computational errors

$9.08 total

b. How much change will you get back if you pay with a ten-dollar bill? *Show or explain how you found your* answer.

$10.00
9.08
00.92

92¢ back

Minimal problem-solving strategy

c. There were a total of 12 people at the dinner party. If there is enough salad for each person to have a serving, how much will each serving cost? *Show or explain how you found your answer.*

2 1.00
2 1.00
2 1.00
2 1.00
2 1.00
2 1.00
$6.00

$6.00 total

d. One of the guests took 1/9 of the salad. Another guest took 2/9 of the salad. What fraction of the salad was taken? *Show or explain how you found your answer.*

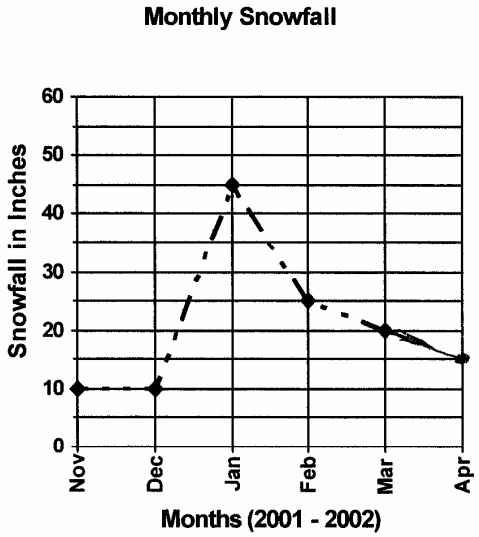
10/11

$\frac{10}{11}$ $\frac{1}{9} + \frac{2}{9}$

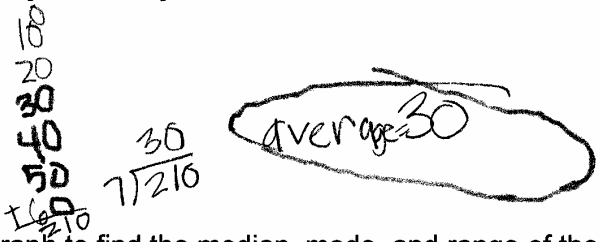
Minimal development of basic skills

Read problems 2, 3, 4, and 5 on this and the next two pages.
Select three problems to answer. Answer ALL of the parts of the three problems you select to answer.
Cross out the one problem that you do not choose to answer.

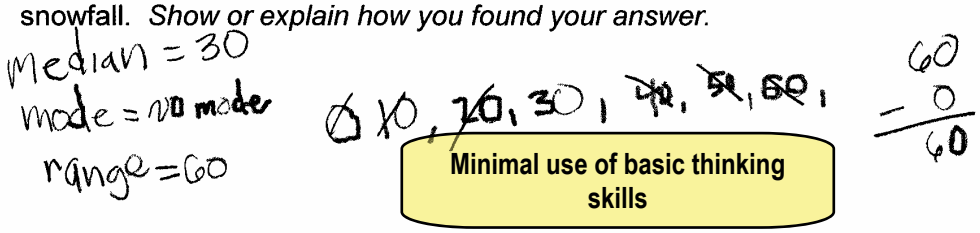
2. At Black Bear Mountain Ski Area the monthly snowfalls are shown in the following graph.



a. Use the information in the graph to find the mean (average) snowfall for the 5 months shown. *Show or explain how you found your answer.*

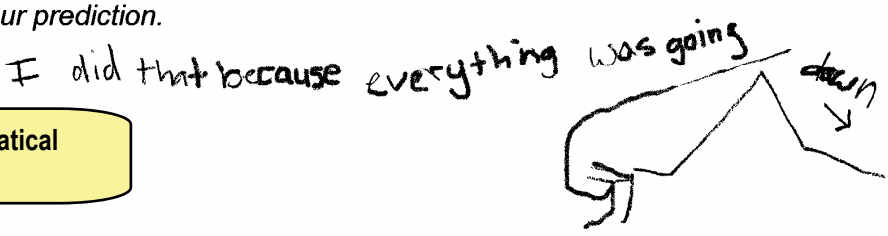


b. Use the information in the graph to find the median, mode, and range of the monthly snowfall. *Show or explain how you found your answer.*



Minimal use of basic thinking skills

c. Using the information in the graph, predict the monthly snowfall for April and add it to the graph. *Justify (explain) your prediction.*



Inadequate mathematical vocabulary

3. Sue is earning money for summer camp. She does chores for her neighbors and charges $3.50 per hour.

c. In the chart below **n** represents the number of hours she worked at each job. Complete the chart to show how much money she earned at each job. *Show or explain how you found your answer.*

	Hours	**Earnings per Job**
	n	$3.50 x **n** = ?
Job 1	3	
Job 2	2	
Job 3	1	
Job 4	4	
Job 5	4	
Job 6	3	

b. What is the total amount Sue has earned for summer camp? *Show or explain how you found your answer.*

c. Let **n** represent the number of hours Sue works. If the camp costs $126.00, write an equation, **using n**, to show how many more hours she needs to work to pay for camp. Solve the equation. *Show or explain how you found your answer*

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4. The Appaloosa Middle School basketball team practices each week on Monday, Tuesday, and Wednesday for 2 ½ hours after school.

a. If practice begins at 3:15 PM, what time does practice finish? *Show or explain how you found your answer.*

3:15
+ 2hours
5:15

b. What is the total time they practice each week? *Show or explain how you found your answer.*

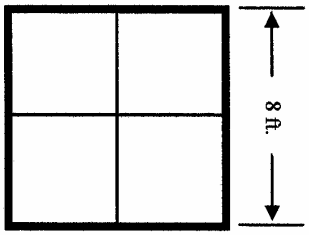
2 hours 15 minutes

c. If students are required to practice for 10 hours before they may play in their first game, how many days will they have to practice before they qualify to play? *Show or explain how you found your answer.*

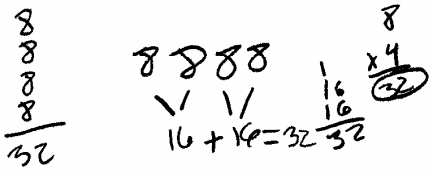
10
x 2
20 days

Minimal evidence of understanding of situations

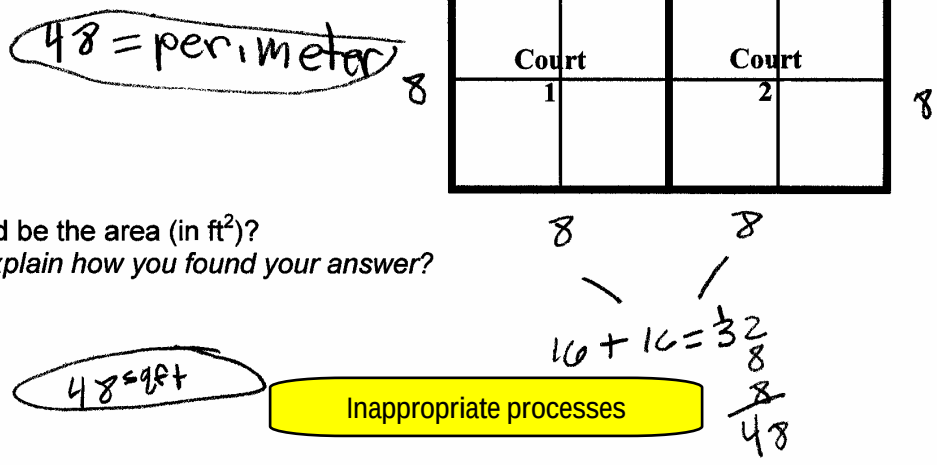
5. The side length of a four-square court measures 8 ft.



a. What is the perimeter of the four-square court? *Show or explain how you found your answer.*



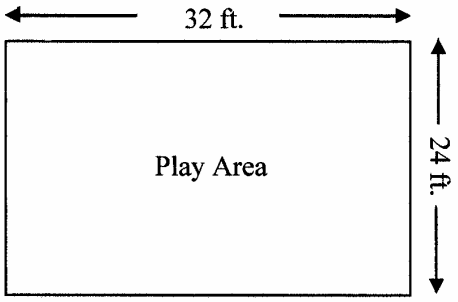
a. What would be the perimeter of the rectangle formed by 2 four-square courts if they shared one side? *Show or explain how you found your answer.*

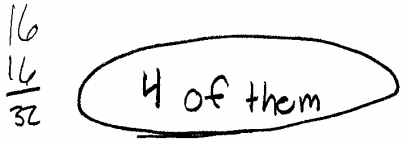


b. What would be the area (in ft^2)? *Show or explain how you found your answer?*

Inappropriate processes

d. If the play area measures 32 ft. x 24 ft., how many individual four-square courts can you fit into the area if they could share any number of sides? *Show or explain how you found your answer.*





Minimal evidence of understanding of situation